

## STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0040126; AI 19836; PER20090001** to discharge to waters of the State of Louisiana as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

- I. **THE APPLICANT IS:** Town of Cottonport  
Cottonport Wastewater Treatment Facility  
P.O. Box 118  
Cottonport, LA 71327
- II. **PREPARED BY:** Afton J. Bessix
- DATE PREPARED:** March 12, 2010
- III. **PERMIT ACTION:** reissue LPDES permit LA0040126, AI 19836; PER20090001
- LPDES application received: September 17, 2009
- EPA has not retained enforcement authority.  
LPDES permit issued: November 1, 2004  
LPDES permit expired: October 31, 2009

IV. **FACILITY INFORMATION:**

- A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the Town of Cottonport.
- B. The permit application does not indicate the receipt of industrial wastewater.
- C. The facility is located on Prison Road in Cottonport Industrial Park in Cottonport, Avoyelles Parish.
- D. The treatment facility consists of an activated sludge mechanical treatment with the use of two aerators. Disinfection is by chlorination.
- E. Outfall 001

Discharge Location: Latitude 30° 58' 26" North  
Longitude 92° 2' 45" West

Description: treated sanitary wastewater

Design Capacity: 0.26 MGD

Type of Flow Measurement which the facility is currently using:  
Continuous Recorder

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**V. RECEIVING WATERS:**

The discharge is into an unnamed ditch; thence into the Bayou Des Glaisses Diversion Canal in segment 060207 of the Vermilion - Teche Basin. This segment is not listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 060207 of the Vermilion - Teche Basin are as indicated in the table below<sup>1/</sup>:

Overall Degree of Support for Segment 060207	Degree of Support of Each Use						
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Partial	Full	Full	Not Supported	N/A	N/A	N/A	N/A

<sup>1/</sup>The designated uses and degree of support for Segment 060207 of the Vermilion - Teche Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

**VI. ENDANGERED SPECIES:**

The receiving waterbody, Subsegment 060207 of the Vermilion - Teche Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated January 5, 2010 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

**VII. HISTORIC SITES:**

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

**VIII. PUBLIC NOTICE:**

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

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Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Ms. Afton J. Bessix  
Water Permits Division  
Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

**IX. PROPOSED PERMIT LIMITS:**

Subsegment 060207, Bayou des Glaisses Diversion Channel, is not listed on LDEQ's Final 2006 303(d) List as impaired. However, subsegment 060207 was previously listed as impaired for nutrients, suspended solids/turbidity/siltation, organic enrichment/low DO, carbofuran, and phosphorous, for which the below TMDL's have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDL's and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The following TMDL's have been established for subsegment 060207:

*Chatlin Lake Canal/Bayou Du Lac and Bayou Des Glaisses Diversion Channel TMDLs for Dissolved Oxygen and Nutrients*

The *Chatlin Lake Canal/Bayou Du Lac and Bayou Des Glaisses Diversion Channel TMDLs for Dissolved Oxygen and Nutrients* was finalized on April 19, 2002. The TMDL specifies that the Town of Cottonport STP discharge concentrations of 5 mg/l CBOD<sub>5</sub>. Therefore, the discharge will remain as previously permitted.

The *Chatlin Lake Canal/Bayou Du Lac and Bayou Des Glaisses Diversion Channel TMDLs for Dissolved Oxygen and Nutrients* does not require that the Town of Cottonport upgrade to meet more stringent limits for ammonia nitrogen. Therefore, limits for ammonia nitrogen will remain as previously permitted as well.

*TMDL for TSS, Turbidity, and Siltation for the Bayou Teche Watershed*

The *TMDL for TSS, Turbidity, and Siltation for the Bayou Teche Watershed* was finalized on May 2, 2002. As per the TMDL, "Point source loads do not represent a significant source of TSS as defined in this TMDL. Point sources discharge primarily organic TSS, which does not contribute to habitat impairment resulting from sedimentation. Because the point sources are minor contributors, and dischargers of organic suspended solids from point sources are already addressed by LDEQ through their permitting of point sources to maintain water quality standards for DO, the wasteload allocation for point source contributions were set to zero. This TMDL only addresses the landform contribution of TSS/sediment and does not address the insignificant point source contributions." Therefore, TSS limits will remain as in the previous LPDES permit.



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**Final Effluent Limits:**
**OUTFALL 001**

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
CBOD <sub>5</sub>	10.8	5 mg/l	7.5 mg/l	Limits are set in accordance with the <i>Chatlin Lake Canal / Bayou Dulac and Bayou Des Glaisses Diversion Channel TMDLs for DO and Nutrients</i> .
TSS				Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.
April – October	32.5	15 mg/l	23 mg/l	
November – March	43.4	20 mg/l	30 mg/l	
Ammonia-Nitrogen				Limits are set in accordance with the Bayou Boeuf Wasteload Allocation (90.02)
April – October	4.3	2 mg/l	4 mg/l	
November – March	21.7	10 mg/l	20 mg/l	
Dissolved Oxygen**	N/A	5 mg/l	N/A	Limits are set in accordance with the Bayou Boeuf Wasteload Allocation (90.02)

\*\*This Dissolved Oxygen limit is the lowest allowable average of daily discharges over a calendar month. When monitoring is conducted, the Dissolved Oxygen shall be analyzed immediately, as per 40 CFR 136.3.

**Other Effluent Limitations:**
**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5., the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

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## 2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

## 3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

X. PREVIOUS PERMITS:

LPDES Permit No. LA0040126: Issued: November 1, 2004  
Expired: October 31, 2009

**Interim Effluent Limits:** beginning the effective dated of the permit and lasting through three years from the effective date of the permit.

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Monthly Avg.</u>	<u>Weekly Avg.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	Continuous	Recorder
CBOD <sub>5</sub>				
April - October	10 mg/l	15 mg/l	2/month	Grab
November - March	20 mg/l	30 mg/l	2/month	Grab
TSS				
April - October	15 mg/l	23 mg/l	2/month	Grab
November - March	20 mg/l	30 mg/l	2/month	Grab
Ammonia-Nitrogen				
April - October	2 mg/l	4 mg/l	2/month	Grab
November - March	10 mg/l	20 mg/l	2/month	Grab
Dissolved Oxygen	5 mg/l min	---	2/month	Grab
Fecal Coliform Colonies	200	400	2/month	Grab
pH (Standard Units)	6.0 min	9.0 max	2/month	Grab

**Final Effluent Limits:** beginning three years from the effective date of the permit and lasting through the expiration date of the permit

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Monthly Avg.</u>	<u>Weekly Avg.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	Continuous	Recorder
CBOD <sub>5</sub>	5 mg/l	7.5 mg/l	2/month	Grab
TSS				
April - October	15 mg/l	23 mg/l	2/month	Grab
November - March	20 mg/l	30 mg/l	2/month	Grab
Ammonia-Nitrogen				
April - October	2 mg/l	4 mg/l	2/month	Grab
November - March	10 mg/l	20 mg/l	2/month	Grab
Dissolved Oxygen	5 mg/l min	---	2/month	Grab
Fecal Coliform Colonies	200	400	2/month	Grab
pH (Standard Units)	6.0 min	9.0 max	2/month	Grab



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**XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:****A) Inspections**

A review of the files indicates the following inspections were performed during the period beginning October 2007 and ending October 2009 for this facility.

Date: September 8, 2008

Inspector: LDEQ

Findings and/or Violations:

A Hurricane Gustav related inspection was conducted at the facility and revealed that there was no apparent damage to the facility. At the time of inspection, the Cottonport WWTP was running normally. However, there was a loss of power during the Hurricane and the aerator motor burned, but the motor was replaced. It was noted that the facility is in need of an emergency generator.

**B) Compliance and/or Administrative Orders**

A review of the files indicates that there were no recent enforcement actions administered against this facility.

**C) DMR Review**

A review of the discharge monitoring reports for the period beginning October 2007 through October 2009 has revealed the following violations:

Parameter	Outfall	Period of Excursion	Permit Limit	Reported Quantity
TSS (monthly avg.)	001	December 2007	20 mg/l	22.5 mg/l
NH <sub>3</sub> -N (monthly avg.)	001	February 2008	10 mg/l	21.4 mg/l
NH <sub>3</sub> -N (weekly avg.)			20 mg/l	21.4 mg/l
CBOD <sub>5</sub> (monthly avg.)	001	February 2008	5 mg/l	6.75 mg/l
NH <sub>3</sub> -N (monthly avg.)	001	March 2008	21.7 lbs/day	No Report
NH <sub>3</sub> -N (monthly avg.)			10 mg/l	No Report
NH <sub>3</sub> -N (weekly avg.)			20 mg/l	No Report
CBOD <sub>5</sub> (monthly avg.)	001	March 2008	5 mg/l	7.20 mg/l
CBOD <sub>5</sub> (monthly avg.)	001	April 2008	5 mg/l	6.08 mg/l
Fecal Coliform (monthly avg.)	001	May 2008	200/100 ml	291/100 ml
CBOD <sub>5</sub> (monthly avg.)	001	May 2008	5.0 mg/l	5.66 mg/l
NH <sub>3</sub> -N (monthly avg.)	001	June 2008	2 mg/l	6.9 mg/l
NH <sub>3</sub> -N (weekly avg.)			4 mg/l	11.3 mg/l
Fecal Coliform (monthly avg.)	001	June 2008	200 /100 ml	309/100 ml
CBOD <sub>5</sub> (monthly avg.)	001	June 2008	5 mg/l	5.65 mg/l
NH <sub>3</sub> -N (monthly avg.)	001	July 2008	2 mg/l	11.45 mg/l
NH <sub>3</sub> -N (weekly avg.)			4 mg/l	13.4 mg/l
Fecal Coliform (monthly avg.)	001	July 2008	200/100 ml	360/100 ml
CBOD <sub>5</sub> (monthly avg.)	001	August 2008	10.8 lbs/day	21.136 lbs/day
Fecal Coliform (monthly avg.)	001	September 2008	200/100 col	278/100 col
TSS (monthly avg.)	001	October 2008	15 mg/l	16 mg/l
Fecal Coliform (monthly avg.)	001	October 2008	200/100 col	291/100 ml
TSS (monthly avg.)	001	November 2008	20 mg/l	36 mg/l
TSS (weekly avg.)			30 mg/l	69 mg/l

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Fecal Coliform (monthly avg.)	001	November 2008	200/100 col	967/100 col
Fecal Coliform (weekly avg.)			400/100 col	2,364/100 col
CBOD <sub>5</sub> (monthly avg.)	001	November 2008	5 mg/l	10 mg/l
CBOD <sub>5</sub> (weekly avg.)			7.5 mg/l	13 mg/l
CBOD <sub>5</sub> (monthly avg.)	001	December 2008	5 mg/l	8 mg/l
CBOD <sub>5</sub> (weekly avg.)			7.5 mg/l	12 mg/l
TSS (monthly avg.)	001	February 2009	20 mg/l	47 mg/l
TSS (weekly avg.)			30 mg/l	86 mg/l
CBOD <sub>5</sub> (monthly avg.)	001	February 2009	5 mg/l	8.4 mg/l
CBOD <sub>5</sub> (weekly avg.)			7.5 mg/l	11.7 mg/l
TSS (monthly avg.)	001	May 2009	15 mg/l	25 mg/l
TSS (weekly avg.)			23 mg/l	41 mg/l
CBOD <sub>5</sub> (monthly avg.)	001	May 2009	5 mg/l	9.92 mg/l
CBOD <sub>5</sub> (weekly avg.)			7.5 mg/l	11.77 mg/l
TSS (monthly avg.)	001	June 2009	15 mg/l	18 mg/l
NH <sub>3</sub> -N (monthly avg.)	001	July 2009	2 mg/l	4.9 mg/l
NH <sub>3</sub> -N (weekly avg.)			4 mg/l	7.36 mg/l
Fecal Coliform (monthly avg.)	001	July 2009	200/100 col	1,001/100 col
Fecal Coliform (weekly avg.)			400 /100 col	>2,000/100 col
TSS (monthly avg.)	001	August 2009	15 mg/l	67 mg/l
TSS (weekly avg.)			23 mg/l	130 mg/l
NH <sub>3</sub> -N (monthly avg.)	001	August 2009	2 mg/l	3.05 mg/l
Fecal Coliform (monthly avg.)	001	August 2009	200/100 ml	1,275/100 col
Fecal Coliform (weekly avg.)			400/100 ml	>2,000/100 col
CBOD <sub>5</sub> (monthly avg.)	001	August 2009	5 mg/l	7.675 mg/l
CBOD <sub>5</sub> (weekly avg.)			7.5 mg/l	9.87 mg/l
TSS (monthly avg.)	001	September 2009	15 mg/l	23.5 mg/l
TSS (weekly avg.)			23 mg/l	42 mg/l
Fecal Coliform (weekly avg.)	001	September 2009	400/100 ml	>2,000/100 ml
CBOD <sub>5</sub> (monthly avg.)	001	September 2009	5 mg/l	6.505 mg/l
CBOD <sub>5</sub> (weekly avg.)			7.5 mg/l	9.6 mg/l
Fecal Coliform (weekly avg.)	001	October 2009	400 mg/l	>2,000/100 ml

- The DMR from January 2008 was not on file and available for review.
- The Ammonia-Nitrogen parameter and limits were not reported on the DMR for May 2008.
- The Ammonia-Nitrogen parameter and limits were not reported on the DMR for August 2008.

\*\* Due to the high number of reporting issues noted above, the facility was referred to the Enforcement Division on January 29, 2010.

## XII. ADDITIONAL INFORMATION:

The Louisiana Department of Environmental Quality (LDEQ) reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's. The LDEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

In accordance with LAC 33:IX.2903., this permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under

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sections 301(b)(2)(c) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act, if the effluent standard or limitations so issued or approved:

- a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b) Controls any pollutant not limited in the permit; or
- c) Requires reassessment due to change in 303(d) status of waterbody; or
- d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.26 MGD.

Effluent loadings are calculated using the following example:

$$\text{CBOD}_5: 8.34 \text{ lb/gal} \times 0.26 \text{ MGD} \times 5 \text{ mg/l} = 10.8 \text{ lb/day}$$

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 0.10 and 0.50 MGD.

Effluent CharacteristicsMonitoring Requirements

	<u>Measurement</u>	<u>Sample</u>
	<u>Frequency</u>	<u>Type</u>
Flow	Continuous	Recorder
CBOD <sub>5</sub>	2/month	Grab
Total Suspended Solids	2/month	Grab
Ammonia-Nitrogen	2/month	Grab
Dissolved Oxygen	2/month	Grab
Fecal Coliform Bacteria	2/month	Grab
pH	2/month	Grab

Pretreatment Requirements

Based upon consultation with LDEQ pretreatment personnel, general pretreatment language will be used due to the lack of either an approved or required pretreatment program.

Pollution Prevention Requirements

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report **each year** for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in Part II of the permit.

The audit evaluation period is as follows:

<b>Audit Period Begins</b>	<b>Audit Period Ends</b>	<b>Audit Report Completion Date</b>
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date



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**XIII. TENTATIVE DETERMINATION:**

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

**XIV. REFERENCES:**

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2009.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 2006.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2009.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2009.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Town of Cottonport, Cottonport Wastewater Treatment Facility, September 17, 2009.